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January 10, 2005

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1 2		PART REGULATION 5 Standards for Toxic Air Contaminants and Hazardous Air Pollutants
3	REGU	LATION 5.01 General Provisions
4 5		ollution Control District of Jefferson County cson County, Kentucky
6 7 8 9 10 11 12 13 14	Pursu Neces adopt accom toxic a emissi all app	es To: KRS Chapter 77 Air Pollution Control sity And Function: KRS 77.180 authorizes provides that the Air Pollution Control Board to may make and enforce all needful orders, rules, and regulations necessary or proper to applish the purposes of KRS Chapter 77. This regulation establishes the general provisions for air contaminants, the requirement for environmental acceptability of toxic air contaminant ions, and the requirement that new or modified processes or process equipment comply with olicable emission standards upon commencing operation testing and monitoring to comply with undards for hazardous air pollutants.
15 16 17 18 19 20 21	Terms given shall h	to them in Regulation 1.02 <i>Definitions</i> . As used in the Part 5 regulations, the following terms have the meaning given to them in this section.  "Stationary source" means any building, structure, facility, or installation that emits or may emit any air pollutant that has been designated as hazardous by the District.  "Benchmark ambient concentration" means the concentration of a toxic air contaminant that
22 23 24 25 26 27 28	1.1.1	is used in determining environmental acceptability pursuant to Regulation 5.21 <i>Environmental Acceptability for Toxic Air Contaminants</i> . The benchmark ambient concentration for a carcinogen (BAC <sub>C</sub> ) is the concentration, including an averaging time frame, of a toxic air contaminant that is representative of an additional lifetime cancer risk of one in one million ( $1 \otimes 10^{-6}$ ). The benchmark ambient concentration for a carcinogen is established pursuant to Regulation 5.20 <i>Methodology for Determining Benchmark Ambient Concentration for a Toxic Air Contaminant</i>
29 30 31 32 33 34	1.1.2	Section 3. The benchmark ambient concentration for the noncarcinogenic effects of a toxic air contaminant (BAC $_{NC}$ ) is the concentration, including an averaging time frame, of a toxic air contaminant that is likely to be without an appreciable risk of deleterious effects during a lifetime. The benchmark ambient concentration for the noncarcinogenic effects of a toxic air contaminant is established pursuant to Regulation 5.20 Section 4.
35 36	1.2	"Category 1 TAC" means a toxic air contaminant listed in Regulation 5.23 Categories of Toxic Air Contaminants Section 1.  "Category 2 TAC" means a toxic air contaminant listed in Regulation 5.23 Section 2.
37 38 39	1.3 1.4 1.5	"Category 2 TAC" means a toxic air contaminant listed in Regulation 5.23 Section 2. "Category 3 TAC" means a toxic air contaminant listed in Regulation 5.23 Section 3. "Category 4 TAC" means a toxic air contaminant listed in Regulation 5.23 Section 4. "Da minimis amission" means any of the following:
40 41	1.6 1.6.1	"De minimis emission" means any of the following:  If the estimation of the emission of a TAC that may be contained in a mixture of

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42 43		chemicals is based upon the information contained on the Material Safety Data Sheet (MSDS) for that mixture, then the emission of the TAC is deemed to be de minimis if
43		the concentration of that TAC is less than either of the following:
45	1.6.1.1	For a TAC that is determined to be a carcinogen, 0.1%, or
46	1.6.1.1	For any other TAC, 1.0%,
47	1.6.2	The emissions from a process or process equipment or activity that is included on the
48	1.0.2	Trivial Activity list that is part of the District's EPA-approved Title V Operating Permit
49		Program, available on the Internet at "http://www.apcd.org/permit/t5/trivial.pdf",
50	1.6.3	The emissions from a process or process equipment or activity that is included on the
51	1.0.5	Insignificant Activity list that is part of the District's EPA-approved Title V Operating
52		Permit Program, available on the Internet at "http://www.apcd.org/permit/t5/
53		insignificant.pdf", or
54	1.6.4	The emission of a TAC from a process or process equipment that is equal to or less than
55	1.0.7	the amounts calculated by using the following method:
56	1.6.4.1	Determine the benchmark ambient concentrations pursuant to Regulation 5.20
57	1.0.7.1	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air
58		Contaminant Section 4 and, if the TAC is determined to be a carcinogen, Section 3,
59	1.6.4.2	Multiply the BAC <sub>NC</sub> (in $\mu$ g/m <sup>3</sup> ) by:
60	1.6.4.2.1	0.54 (the 1-Hour Factor in Regulation 5.22 <i>Procedures for Determining the</i>
61	1.0.1.2.1	Maximum Ambient Concentration of a Toxic Air Contaminant Section 2 Table 1)
62		to derive the pound-per-hour de minimis value for the BAC $_{NC}$ , and
63	1.6.4.2.2	By the applicable (based upon the averaging time period of the $BAC_{NC}$ ) Annual,
64	110111212	24-Hour, or 8-Hour Factor in Regulation 5.22 Section 2 Table 1 to derive the
65		applicable pound-per-averaging time period de minimis value for the $BAC_{NC}$ ,
66	1.6.4.3	If the TAC is a carcinogen, multiply the BAC <sub>C</sub> (in $\mu$ g/m <sup>3</sup> ) by:
67	1.6.4.3.1	0.54 (the 1-Hour Factor in Regulation 5.22 Section 2 Table 1) to derive the
68		pound-per-hour de minimis value for the BAC <sub>c</sub> , and
69	1.6.4.3.2	480 (the Annual Factor in Regulation 5.22 Section 2 Table 1) to derive the annual
70		pound-per-year de minimis value for the BAC <sub>c</sub> ,
71	1.6.4.4	If the TAC is not determined to be a carcinogen, then an emission of that TAC that
72		is less than both the pound-per-hour de minimis value determined in section 1.6.4.2.1
73		and the applicable pound-per-averaging time period de minimis value determined in
74		section 1.6.4.2.2 is deemed to be a de minimis emission,
75	1.6.4.5	If the TAC is determined to be a carcinogen, then compare the pound-per-hour
76		de minimis values derived in sections 1.6.4.2.1 and 1.6.4.3.1 to determine which
77		value is smaller. An emission of that TAC that is less than both the smaller pound-
78		per-hour de minimis value and the corresponding applicable averaging time period
79		de minimis value determined in section 1.6.4.2.2 or 1.6.4.3.2 is deemed to be a de
80		minimis emission, or
81	1.6.5	The emissions from a new or modified surface coating process, including a coating
82		change, or process equipment, for which the construction permit application qualifies
83		under any of the circumstances described in Regulation 5.21 section 1.5, and for which
84		the potential volatile organic compound emissions are less than 5.0 tons per year.
85		Exempt stationary source" means any of the following:
86	1.7.1	A gasoline dispensing facility subject to the provisions of Regulation 6.40 Standards of

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- Performance for Gasoline Transfer to Motor Vehicles (Stage II Vapor Recovery and Control), that may also include a cold cleaner subject to the provisions of Regulation 6.18 Standards of Performance for Solvent Metal Cleaning Equipment Section 4 Cold Cleaners. A gasoline dispensing facility does not include the initial transfer of gasoline into the fuel tanks of new motor vehicles at an automobile or truck assembly plant,
- 1.7.2 A stationary source subject to the provisions of Regulation 6.44 Standards of Performance For Existing Commercial Motor Vehicle And Mobile Equipment Refinishing Operations or Regulation 7.79 Standards of Performance For New Commercial Motor Vehicle And Mobile Equipment Refinishing Operations,
- 97 1.7.3 A stationary source subject to the provisions of Regulation 5.02 Adoption of National
  98 Emission Standards for Hazardous Air Pollutants section 3.12 National
  99 Perchloroethylene Air Emission Standards for Dry Cleaning Facilities, or
- 100 1.7.4 A stationary source whose only permitted process or process equipment is a cold cleaner subject to the provisions of Regulation 6.18 Section 4.
- 102 1.8 "Group 1 stationary source" means a stationary source subject to Regulation 2.16 *Title V*103 *Operating Permits*.
  - 1.9 "Group 2 stationary source" means a stationary source that either:
  - 1.9.1 Is not a Group 1 or Exempt stationary source, and has applied for an operating permit pursuant to Regulation 2.17 *Federally Enforceable District Origin Operating Permits* (FEDOOP stationary source), or
- 1.9.2 Is not a Group 1, FEDOOP, or Exempt stationary source, and the actual emissions from the stationary source are 25 or more tons per year individually of sulfur dioxide, particulate matter, volatile organic compounds, or oxides of nitrogen.

## 111 SECTION 21 Applicability

- This regulation applies to the owner or operator of any process or process equipment that emits or may emit a toxic air contaminant or hazardous air pollutant or stationary source for which a toxic
- air contaminant or hazardous air pollutant emission standard or other requirement is prescribed in
- air contaminant or hazardous air pollutant emission standard or other requirement is prescribed in
- a Part 5 under this regulation. A new or modified process or process equipment shall sources must
- 116 comply with all applicable emission standards upon commencing operation.

## 117 Section 3 General Duty

- The owner or operator of a process or process equipment from which a toxic air contaminant is or
- may be emitted shall provide the utmost care and consideration to prevent the potential harmful
- effects of the emissions resulting from the process or process equipment. A person shall not allow
- any process or process equipment to emit a toxic air contaminant in a quantity or duration as to be
- harmful to the health and welfare of humans, animals, and plants.

## **Section 2 Emission Tests and Monitoring**

- Emission tests and monitoring shall be conducted and reported as set forth in this regulation and the
- 125 EPA Regulation on National Emission Standards for Hazardous Air Pollutants (40 CFR 61) and its
- 126 appendices. Where the test results using an alternative method do not adequately indicate whether
- a source is in compliance with a standard, the District may require use of the reference method or
- its equivalent. Equivalent test methods for Federal Regulations incorporated in Regulations 5.02

[Approved by the Committee of the Whole on January 13, 2005, for Public Review] 129 and 5.04 require EPA approval. **SECTION 3 Emission Testing Facilities** 130 The owner or operator of a new source subject to Regulation 5 and, at the request of the District, the 131 132 owner or operator of an existing source subject to Regulation 5 shall provide or cause to be provided 133 emission testing facilities as follows: 134 Sampling ports adequate for test methods applicable to such source, Safe sampling platforms, 135 136 Safe access to sampling platforms, and 137 3.4 Utilities for sampling and testing equipment.

Adopted v1/7-14-76; effective 9-1-76; amended v2/6-13-79, v3/4-20-88.

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